

2001P08878US01
60,426-381**REMARKS**

Applicant has amended the specification and several of the claims. Except for those amendments specifically discussed below, none of these amendments is in any way related to any objection or rejection. No new matter has been added.

Claims 1 and 24 were amended to correct minor informalities as noted by the Examiner. Claim 28 has been amended to distinctly claim the subject matter of the invention according to 35 U.S.C. § 112.

Claims 19-22 and 30-31 have been rejected as being anticipated by Ghabra et al. (U.S. 6,650,236). Amended claim 19 includes the limitation that the frequency shift keyed (FSK) receiver is engaged responsive to receiving an amplitude shift keyed (ASK) wake-up signal from the tire pressure monitoring system. Amended claim 30 includes the limitation of switching from the amplitude shift keyed receiver to the frequency shift keyed receiver responsive to a triggering event that includes receiving the amplitude shift keyed signal from the tire pressure monitoring system.

Ghabra et al discloses only a receiver that is capable of receiving both a FSK signal and an ASK signal, but does not disclose or suggest a wake-up signal that causes a switch to the FSK receiver. Ghabra et al only discloses the use of a single RF integrated circuit that can be used for both FSK and ASK signals depending on the type of incoming signal. Ghabra et al does not disclose a wake-up signal to cause engagement of the FSK receiver as is required in claims 19 and 30. Accordingly, Applicant requests withdrawal of the rejection to claims 19-22 and 30-31.

Claims 1,4-7 and 15 were rejected as being obvious over the combination of Mendez et al. (US 5,463,374) in view of Ghabra et al. Claim 1 has been amended to include the limitation that the transmission indicative of current tire conditions includes an amplitude shift keyed wake-up signal for alerting the receiver of an incoming frequency shift keyed transmission signal. The combination of Mendez et al and Ghabra et al does not disclose or suggest this limitation. Mendez et al discloses a common signal for both the tire pressure monitoring system and the remote keyless entry system. Ghabra et al discloses the use of an FSK signal for the tire pressure monitoring system and an ASK signal for the RKE system. However, the combination

2001P08878US01
60,426-381

does not disclose or suggest the wake-up signal as is required in claim 1. Applicant requests withdrawal of the rejection to claims 1,4-7 and 15.

Claims 8-13 were rejected as being obvious in view of Mendez et al., Ghabra et al and McClelland (U.S. 5,963,128). Claims 8-13 ultimately depend from claim 1, and claim 1 includes limitation not disclosed or suggested by the proposed combination. Applicant requests withdrawal of the rejection to claims 8-13.

Claim 14 was rejected as being obvious in view of Mendez et al., Ghabra et al and Thomas et al. (U.S. 4,734,674). Thomas et al discloses a valve stem mounted tire pressure detector that includes a means to prevent unauthorized or accidental removal of the detectors (10). The means include a split sleeve (116) that receives a portion of the detector (10). With the detector threaded onto the valve stem, the split sleeve (116) is tightened by way of a set screw. The tightened split sleeve (116) provides a frictional engagement to the valve stem that prevents removal of the detector (10). The detector (10) of Thomas et al simply screws onto a valve stem and therefore does not pivot relative to the valve stem in any direction. Claim 14 has been amended to independent form and includes the limitation that the sensor assembly includes a valve stem that is pivotally mounted to the sensor assembly and lockable in a desired pivoted position. The sensor in Thomas et al does not disclose a pivoting valve stem. In fact, the Thomas et al detector does not include a valve stem. Accordingly, the proposed combination does not disclose or suggest the limitations of claim 14. Applicant requests withdrawal of the rejection to claim 14.

Claim 16 was rejected as being obvious in view of Mendez et al., Ghabra et al and Robillard et al. (U.S. 6,259,361). Claim 16 ultimately depends from an allowable base claim and is therefore also allowable. Applicant requests withdrawal of the rejection to claim 16.

Claims 17 and 18 were rejected as being obvious in view of Mendez et al., Ghabra et al., Stewart et al. (6,043,738) and Walker et al. (U.S. 5,192,929). Claim 17 includes the limitation of a learning mode for discerning between signals from sensor assemblies disposed on other motor vehicles, and compares acceleration values obtained from the sensor assembly with vehicle acceleration to distinguish between sensor assemblies on the motor vehicle. Claim 18 includes the limitation that the receiver includes a localization mode for discerning the specific

2001P08878US01
60,426-381

position of the tire on the motor vehicle by way of an external triggering source that initiates specific transmission from a specific sensor assembly.

The proposed combination of Stewart et al and Walker et al is not proper because there is no suggestion or motivation to make the combination. In fact, Walker et al. teaches away from this combination. Stewart et al. discloses a method of detecting sensor position by inflating each tire to a predetermined tire pressure and then operating the vehicle for several minutes to record sensor position and to differentiate from other vehicles. Walker et al. disclose the use of fixed wheel sensors in a known location such as are utilized with an ABS system to determine wheel speed. The Walker et al. sensors are hard wired and are not within a tires. Further, Walker specifically states that "while the system is effective and of low added cost to a vehicle already equipped with ABS, it is not economically viable on a vehicle not so equipped" (Walker Col 1, lines 20-23). This statement in Walker indicates that there would be no benefit to any combination with non-ABS system, and explicitly teaches away from any such combination. Further, there is no reason or benefit to determining a location of fixed sensors as disclosed in Walker. Where there is no benefit there can be no suggestion or motivation.

For these reasons the combination is not proper and Applicant requests withdrawal of the rejection to claims 17 and 18.

Claim 23,24,32 and 33 were rejected as being obvious in view of Mendez et al. and Ghabra et al. Claims 23 and 24 depend from amended claim 19 and claims 32 and 33 depend from amended claim 30. Claims 19 and 30 as amended include limitations not disclosed or suggested by the proposed combination. Accordingly, claims 23,24,32 and 33 depend from an allowable base claim and therefore allowable. Applicant requests withdrawal of this rejection.

Claims 25 and 27 were rejected as being obvious over Stewart et al in view of Weinzerl et al. (U.S. 5,357,798). There is no suggestion or motivation to make the proposed combination because there is no suggestion or motivation to make the proposed combination. As discussed above, Stewart et al discloses inflating each tire to a predetermined pressure and driving the vehicle for a predetermined time. Weinzerl et al. discloses a system including fixed wheel sensors of a known location for measuring wheel speed to determine if a wheel is loosing traction.

2001P08878US01
60,426-381

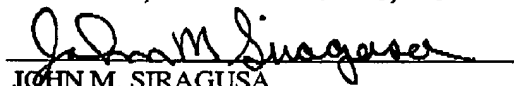
The office action states that the comparison of wheel speed with vehicle speed as disclosed in Weinzerl et al is a suitable control means. However, such a control means requires that the sensor position be known in order to determine wheel slipping. As appreciated, it is only with the prior knowledge of sensor position that a proper comparison to vehicle speed can be made to determine if a wheel is slipping. Weinzerl et al utilizes the wheel position along with the vehicle speed to determine a predicted wheel speed for a given vehicle acceleration. It is only with knowledge of the sensor position that such a prediction is valid. Using sensors of unknown location would not work in Weinzerl et al. Conversely, if in Stewart et al. the position of the sensors were known there would be no need and therefore no benefit to determining a position. The two references teach away from each other and therefore do not provide the requisite suggestion and motivation. Accordingly, it is for these reasons that the proposed combination is improper and the rejection to claim 25 and 27 should be withdrawn.

Claims 26 and 29 were rejected as being obvious over Stewart et al, Weinzerl et al. and further in view of Niekerk et al. (U.S. 6,463,798). Claims 26 and 29 are ultimately dependent from an allowable base claim and are therefore also in allowable form. Applicant requests withdrawal of the rejection to claims 26 and 29.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and a Notice to that effect is earnestly solicited. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds, P.C., \$258.00 for three additional independent claims. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.



JOHN M. SIRAGUSA

Registration No. 46,174

CARLSON, GASKEY & OLDS, P.C.

400 West Maple Road, Suite 350

Birmingham, Michigan 48009

(248) 988-8360

Dated: June 28, 2004